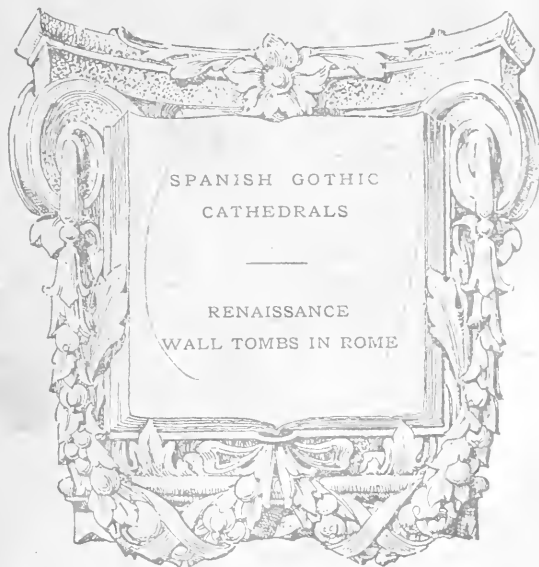


NOVEMBER 1903

THE
BROCHVRE
SERIES
OF ARCHITECTVRAL
ILLVSTRATION



WILLIAM T. FEE

BATES AND GVILD COMPANY
42 CHAVNCY STREET BOSTON

PRICE 10 CENTS



Paint Dies

When repainting is too long deferred. It is economical to repaint before the old paint is dead.

Zinc White Paints

Live longer than other paints, because they carry more oil. They look better and are more economical because frequent repainting is not necessary.

We do not grind

See Our Practical P
"The Paint Question."
"Paints in Architecture"
"Specifications for Arch"
"French Government I



Presented to the
LIBRARY of the
UNIVERSITY OF TORONTO
by

MR. W.T. FEE

urers of zinc paints.

New Jersey
Company
ay, New York

JUDGES O
cannot be persuade
the best. **THEY IN**

FROST & ADA

IF YOU



SAMSON

You can tell at a glance that no other cord is substituted.
It is guaranteed free from waste and imperfections of braid.

what good pencils are,

NOOR PENCILS

RNHILL, BOSTON

SAMPLES.

ON
DAGE

WORKS,

BOSTON.



MANY ARCHITECTS SPECIFY

Dexter Brothers'

English Shingle Stains

but neglect to notify us; consequently substitution is often made to the detriment of all concerned. Write for particulars of **No. 54 WEATHERBEATEN STAIN**

DEXTER BROS. CO., 103-105-107 BROAD ST., BOSTON



GEORGE A. FREEMAN, ARCHITECT
NEW YORK

The BROCHURE SERIES OF ARCHITECTURAL ILLUSTRATION

PUBLISHED MONTHLY BY

BATES & GUILD COMPANY, 42 CHAUNCY ST., BOSTON

Entered at the Boston Post-office as Second-class Mail Matter.

PUBLISHERS' ANNOUNCEMENTS

SUBSCRIPTIONS: Subscription price, \$1.00 a year, in advance, postpaid to any address in the United States or Canada; to foreign countries in the Postal Union, \$1.50. Single copies, 10 cents. Subscriptions may begin with any issue, but as each yearly volume of the magazine commences with the January number, and as index-pages, bindings, etc., are prepared for complete volumes, intending subscribers are advised to date their subscriptions from January.

EXPIRATION OF SUBSCRIPTIONS: The date when a subscription expires is printed on the address label of each magazine. The change of this date becomes a receipt for remittance. No other receipt is sent unless requested.

REMITTANCES: Remittances may be made by Post-office money-order, bank check, express order, or in postage stamps. Currency sent by mail usually comes safely, but should be securely wrapped, and is at the risk of the sender.

CHANGES OF ADDRESS: When a change of address is desired, both the old and the new addresses should be given, and notice of the change should reach this office not later than the tenth of the month. The Publishers cannot be responsible for copies lost through failure to notify them of such changes. The BROCHURE SERIES is mailed on the 15th of each month. Subscribers who do not receive their copies before the end of the month will please notify the Publishers immediately, that they may be traced and any oversight corrected. If not so notified, the Publishers cannot replace losses except on receipt of price.

BACK VOLUMES AND BINDINGS: Back volumes (unbound) for 1897, 1901 and 1902, \$1.00 each. Bound Volumes, in specially designed buckram covers, for 1898, \$3.00; for 1899 and 1900, \$2.00 each; for 1897, 1901 and 1902, \$1.75 each. Subscribers' copies bound uniform for 75 cents a volume. Separate back numbers (with the exception of all issues for 1895 and 1896: May, 1897; Jan., Feb., June and Dec., 1898; Jan., May, June and Dec., 1899; Sept., 1900; Feb., 1901; and Sept. and Nov., 1902, which cannot be supplied separately), ten cents each.

Notes

Those architects who realize that perfection is made up of trifles, and who take every care in the specification and superintendence of the minor items of construction will find interesting facts in the report of tests on sash cord made by Prof. E. F. Miller of the Massachusetts Institute of Technology. Samples of chain and cord were taken from a local hardware stock, and were tested on a specially built machine to give exactly the test of raising and lowering a sash. The cord taken was the Samson Spot Cord, which was used in the new building of the Massachusetts Institute of Technology, the building of which was the cause of many tests of building materials. While the cord lacks the tensile strength, it far surpasses the wearing quality of the chain, all the tests showing that there is absolutely no connection between tensile strength and durability in running over pulleys. The average number of lifts for the cord, at time of failure, was 214,371; for the chain, 75,848 — nearly 3 to 1.

A copy of the full report on these tests can be secured by addressing the Samson Cordage Works, 115 Congress St., Boston.

The fourth and by all odds the finest special number *The Architectural Review* has issued, will appear in January. It will be the most complete and satisfactory presentation of American Country Houses ever published. About seventy-five well-known architects have contributed plans

and exterior and interior views of their most interesting houses. Several well illustrated articles on different phases of the country-house problem by prominent architectural writers, and groups of classified photographs showing varied treatment of verandas, staircase halls, fire-places, etc., will be other features of the number. As in the case of other special numbers, single copies will cost \$2.00. As there will be a very handsome number later in the year on Country Clubs, it is by all means the best plan to subscribe for a year at \$5.00 and get both specials and ten regular numbers. The publishers will be pleased to send detailed information concerning the Country House number on request.

There come to us regularly two periodicals, one, on Fireproofing, supposedly an independent periodical, the other frankly an advertising monthly published to exploit Expanded Metal. The one devotes most of its space to rabid denunciation of everything in the line of concrete fireproofing; it could not be more biased if it were really owned and controlled by the hollow tile fireproofing trust. The other, calmly, regularly, and without raving about competitive methods, presents interesting accounts and illustrations of new or important uses of Expanded Metal Construction. The one snarls about other people's business, the other finds hardly enough room for its own business. We cannot too strongly urge every architect to see that he gets his copy of *The Doings of Expanded Metal* as regularly as he does the papers he has to pay for.

The Loomis-Manning Filter Co. has moved its main office to the Land Title Building, Broad and Chestnut Streets, Philadelphia.

AMERICAN COUNTRY H O U S E S

THE January issue of The Architectural Review will be a large special number devoted to Artistic Country Houses, contributed by a number of prominent architects, among whom are

Charles A. Platt
Wilson Eyre
H. VanB. Magonigle
Wm. G. Rantoul
Parker & Thomas
Lord & Hewlett
Tracy & Swartwout
Benj. W. Morris, Jr.
Donn Barber
Grosvenor Atterbury
H. M. G. Garden
Green & Wicks
Mauran, Russell & Garden
Chapman & Frazer
Baily & Truscott
Myron Hunt
Frost & Granger
Meade & Garfield
Bragdon & Hillman
George Cary
Howard Shaw
Horace Trumbauer
Andrews, Jaques & Rantoul
Howells & Stokes
J. Foster Warner

and many others

If you are interested in securing a copy of this special number write at once for full information. It will be the finest publication of the sort ever issued

Bates & Guild Company

42 Chauncy Street, Boston

INDIVIDUAL TECHNICAL INSTRUCTION BY CORRESPONDENCE IN D R A W I N G

Architectural
Perspective
Mechanical



DRAWING is the language of the Architect and a thorough understanding of it is essential to success.

Text books have been prepared by such men as Professor W. H. Lawrence, M.I.T.; F. A. Bourne, Arch.; D. A. Gregg, M.I.T.; H. E. Everett, U. of P.; Professor H. W. Gardner, M.I.T.; & others equally well known.

OTHER COURSES, OF ESPECIAL INTEREST TO ARCHITECTS AND DRAFTSMEN, IN ELECTRICAL, STEAM & CIVIL ENGINEERING, HEATING, VENTILATION AND PLUMBING, ARCHITECTURE, CARPENTRY AND BUILDING, AND A FULL CURRICULUM OF OTHER ENGINEERING COURSES.

A specimen instruction paper in Pen and Ink Rendering, by D. A. Gregg, will be sent upon receipt of three 2c stamps to cover cost of postage, etc.

Illustrated 180-page catalogue giving full synopsis of courses, sent *free* upon request.

American
School of Correspondence
at
Armour Institute of Technology
Room 17^E Chicago, Illinois

MASTERS IN ART

△ Notice △

Advance in Price of Back Numbers

On and after January 1, 1904, the price of all Back Numbers of 'Masters in Art'—that is all numbers published prior to that date—will be advanced from Fifteen Cents to

T W E N T Y C E N T S

a copy, whether purchased singly or in yearly sets. The price of the Bound Yearly Volumes will be advanced correspondingly: those bound in Half-morocco from \$3.50 to \$4.25; and those bound in Cloth from \$3.00 to \$3.75.

Orders for Back Numbers and Bound Volumes can be filled at present prices only until
January 1, 1904

List of Back Numbers and Illustrations
of Styles of Bindings on Application

BATES & GUILD COMPANY: BOSTON

DRAWINGS
MADE
WITH



Higgins'
American Drawing Inks
(Blacks and Colors)

Have an excellence peculiarly their own. The best results are only produced by the best methods and means—the best results in Drafting, both mechanical and artistic, can only be attained by using the best Drawing Inks—

HIGGINS' DRAWING INKS.

(Send for color card showing actual inks)

At Dealers in Artists' Materials and Stationery.

Bottles prepaid by mail, 35c. each, or circulars free from

CHAS. M. HIGGINS & CO., Mfrs.

NEW YORK—CHICAGO—LONDON

Main Office, 271 Ninth St. } Brooklyn.
Factory, 240-244 Eighth St. } N.Y., U.S.A.

Officially Approved and Adopted throughout the civilized world as the Standard

KEASBEY & MATTISON'S

➡ **85 Per Cent** ➡

Sectional MAGNESIA Coverings

85 per cent Magnesia Coverings are the highest priced coverings sold, but the cheapest to buy if you have to pay the coal bill yourself.

Buy the Genuine. There are frauds and imitations being offered. All Infringers will be held liable in heavy damages.

85 Per Cent Sectional Magnesia Coverings

MANUFACTURED BY THE

**KEASBEY & MATTISON
COMPANY**

Branches in all the Principal Cities.

AMBLER, PENNA.

A handsome and unique
FINISH for PINE
NOTHING LIKE IT
ever before SHOWN

After long experiment we have succeeded in producing a perfectly dead Stained Pine Finish of unrivaled beauty. It is soft and rich in color and transforms Pine Finish from a cheap effect to one of great beauty. Special attention is called to its use in Apartment Buildings,

**WEATHERED
OAK FINISH**
of great beauty. Perfectly dead and showing all of the fine graining of the wood

as a handsome finish may be obtained at a slight cost by using one of the cheaper woods such as Pine or any soft wood

A full set of panels with complete directions mailed to any Architect on request. Correspondence solicited

Chicago Varnish Company

Dearborn Ave. and Kinzie St., CHICAGO

22 Vesey St., NEW YORK

66 High St., BOSTON

SPANISH GOTHIC CATHEDRALS

RENAISSANCE WALL TOMBS
IN ROME



OLD CATHEDRAL OF SALAMANCA

SPAIN

THE BROCHURE SERIES

OF ARCHITECTURAL ILLUSTRATION

VOL. 9

NOVEMBER, 1903

NO. 11

SPANISH GOTHIC CATHEDRALS

THE critical traveler in Spain will look in vain for any genuinely indigenous Spanish art. It would seem, indeed, as if the arts of all the European schools *except* that of Spain were represented; and that the ancient Spanish monarchs and grandees at whose commands the various edifices arose, showed their enthusiasm for architecture as the Orientals do their delight in dancing, merely by looking on at the performance of others. "Though endowed with the love of architecture, and an intense desire to possess its products," writes Fergusson, "nature seems to have denied to the Spaniard the inventive faculty necessary to enable him to supply himself with the productions so indispensable to his intellectual nature." Each new school of architecture in Europe, indeed, called into being an imitative school in Spain; and while it is, of course, impossible that work done in Spain should not bear at least some superficial impress of the national genius, it still remains basically foreign.

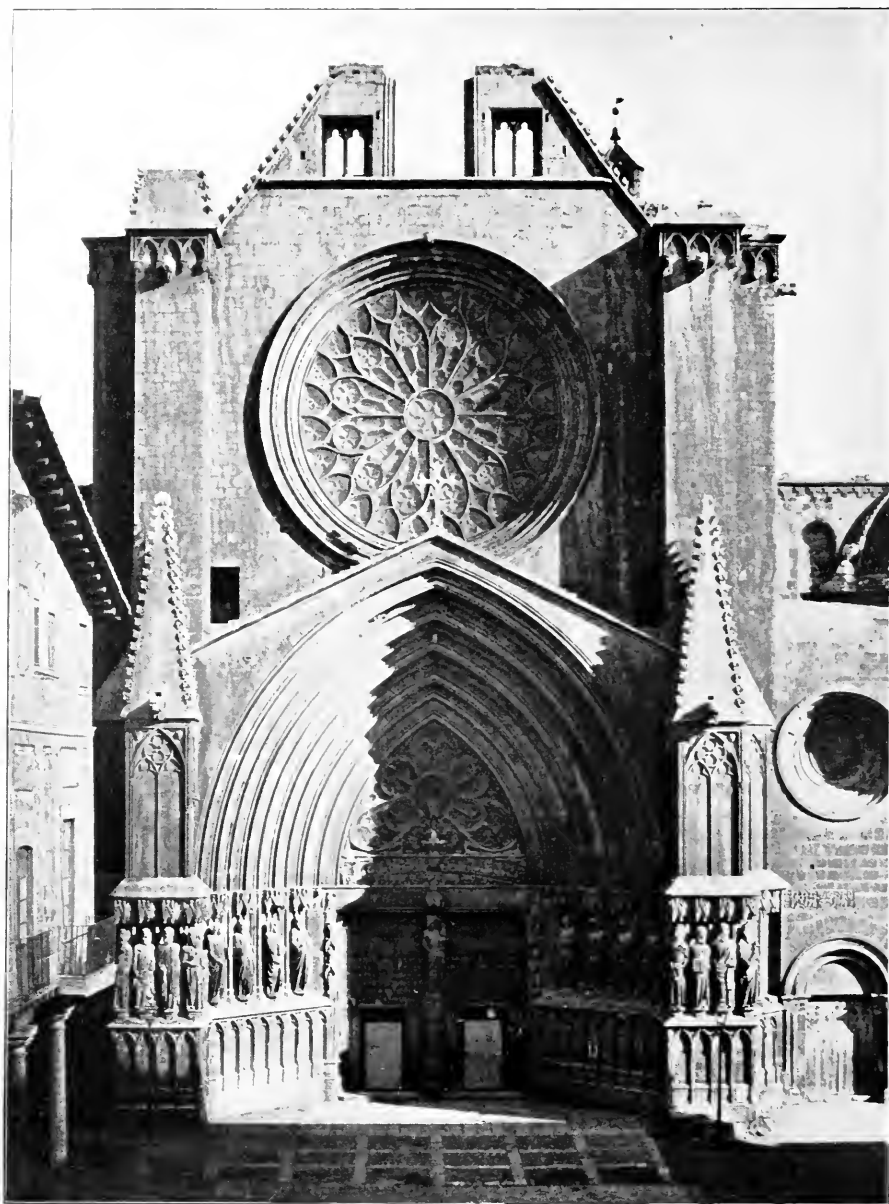
The Pyrenees formed no ethnical barrier between Southern France and Spain, and it is therefore easy to understand that the earlier architecture of Spain should, in general, be closely akin to that of France, and that when the Gothic style was introduced the Spanish examples should reproduce very closely the noble and severe forms of the French cathedrals. Gothic building in Spain began about 1100 and continued into the early sixteenth century. This era may be

divided into three periods; the first, dating from 1100 to the first quarter of the thirteenth century; the second, or middle, period occupying the remainder of the thirteenth and the whole of the fourteenth century; and the third, or late, period comprising the fifteenth century and part of the sixteenth.

The churches and cathedrals of the first period were for the most part begun in the Romanesque epoch, but assumed an early Gothic character before they were completed. In the middle period, the developed style of the thirteenth century French Gothic was introduced, and we find the Cathedrals of Burgos, Toledo, and a little later that of Leon, built closely after French models, probably indeed by imported French architects.

Spanish Gothic may be said to culminate at the time of the building of Seville Cathedral (very possibly the work of German architects) about the opening of the fifteenth century. During the subsequent late period, it became extraordinarily florid in detail, especially in the ribs of the vaulting and the enrichment generally. As examples of this late work we may name the New Cathedral of Salamanca and the Cathedral of Segovia, begun when the Renaissance had already set in.

The one characteristic which perhaps most widely differentiates Spanish cathedrals in outward aspect from those of corresponding date in France, is that the large windows of the French cathedrals



CATHEDRAL OF TARRAGONA, SPAIN

FAÇADE

were soon found to be unsuitable under the burning sun of Spain, and hence were first walled up and afterwards replaced by very much smaller openings. For this reason Spanish Gothic appears at first sight less airy, less *Gothic* than that of any other land.

Salamanca boasts two cathedrals, an older one of the twelfth century, called the "Catedral Vieja," and a new one of the sixteenth, called the "Catedral Nueva." The old cathedral nestles beneath the vast bulk of the new church in such fashion that it is difficult to obtain a photograph which at all reproduces its effect; but the first impression that it makes is one of great boldness and vigorous massiveness of effect, well deserving the epithet "the strong" as applied to it by the famous saying, in which the principal Spanish cathedrals are grouped together as "*Toledo la rica, Salamanca la fuerte, Leon la bella, Oviedo la sacra, e Sevilla la grande*—Toledo the rich, Salamanca the strong, Leon the beautiful, Oviedo the sacred and Seville the great." The best view is from the Patio Chico, a small plaza adjoining the New Cathedral, which shows the fine exteriors of the eastern apses, the turret to the east of the transept, and above all, the magnificent and celebrated lantern over the crossing.

We have put the Old Cathedral of Salamanca first among our illustrations because it shows the transition from the Romanesque to the Gothic style. Indeed, it is quite as possible to consider it a late Romanesque as a Gothic edifice; its exterior would almost wholly bear out the former attribution; but the vaulting of the interior, wherein the main arches are everywhere pointed, the details of the carving, and a certain indefinable something in the general effect, mark it as distinctly touched by Gothic influence. It was founded, probably about 1100, by Count Raymond, a native of Burgundy, but was not finished until one hundred years later.

Another cathedral which is a brilliant example of the transition from the Romanesque to the Gothic style is that of

Tarragona. Unfortunately, as is the case with most Spanish churches, it is so closely hemmed in by surrounding buildings that no general view is obtainable. The main body of the church, begun soon after 1118, dates mainly from the end of the twelfth and the first half of the thirteenth centuries, and thus belongs to just that short transitional period in which the pointed Gothic arch was used where greater strength was required, while the round Romanesque arch was still retained for smaller openings in the walls. But additions were made to it from the fourteenth to the eighteenth centuries; and the capitals throughout the church are sculptured in such well-developed Gothic that it is impossible to consider the Romanesque influence as paramount.

The west façade is shown in our illustration. Although begun in 1278 it was evidently not finished until late in the fourteenth century, and is completely



BURGOS CATHEDRAL, TOWER OVER THE CHOIR



CATHEDRAL OF BURGOS, SPAIN

FAÇADE

Gothic in aspect. In the center is a deep portal flanked by massive buttresses, and surmounted by a tympanum pierced with geometrical tracery of very

The Cathedral of Burgos brings us to the fully developed Gothic style. It was founded in 1221, the best period of early Spanish Gothic, but was not finished for



CATHEDRAL OF BURGOS, SPAIN

THE APSE

delicate execution. Above the portal is a finely wrought rose window. In spite of the incompleteness of its great gable, the façade taken as a whole is very imposing in effect.

more than three hundred years, and the towers of the main façade, built by John of Cologne, date from 1442 to 1458; the octagonal lantern above the crossing was completed by a Burgundian archi-



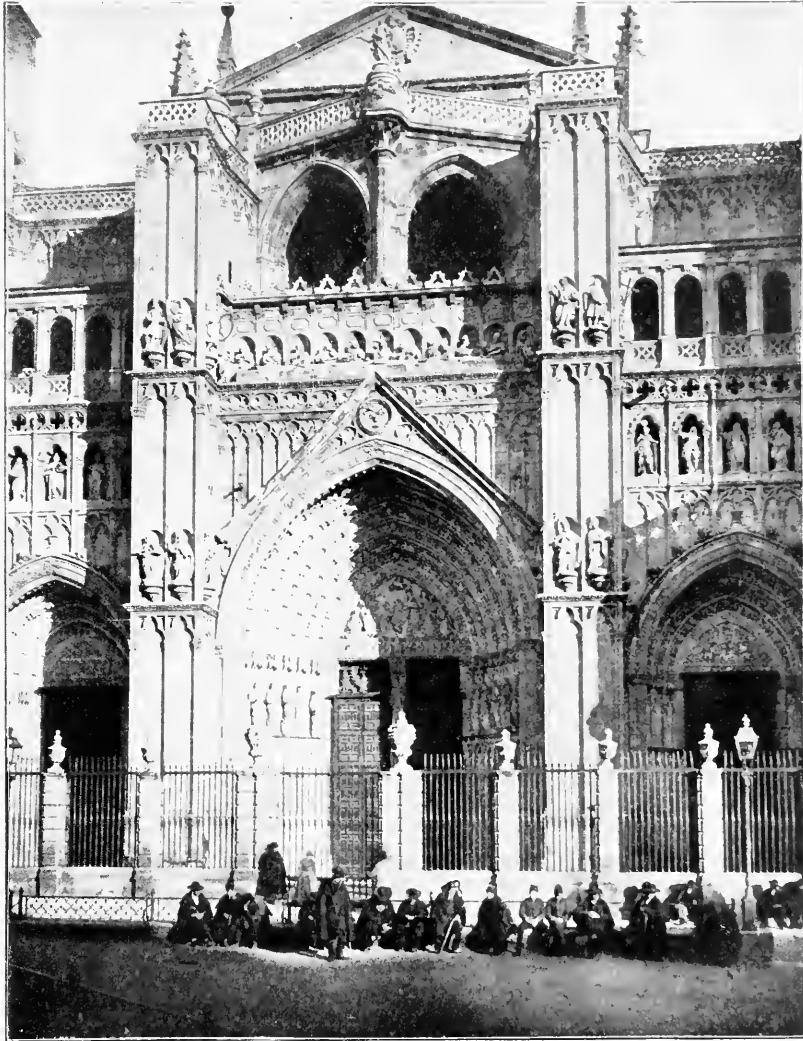
CATHEDRAL OF TOLEDO, SPAIN

GENERAL VIEW

tect in 1567; and in 1790 the lower part of the west façade was remodeled in the Renaissance style, to its great detriment. But the western steeples and the central lantern are so elaborately picturesque

discerned from the view of the apse shown on page 247.

Burgos is in some respects inferior to the Cathedral of Leon; but, on the other hand, it has the distinction of being far



CATHEDRAL OF TOLEDO, SPAIN

WEST PORTAL

that they rather overshadow the nobler scheme of the thirteenth-century body of the church, and give, at first sight, a wrong impression as to its general age and character, which may better be

more Spanish in detail and in general effect and is so nobly picturesque in aspect that one cannot well find fault.

The Cathedral of Toledo was founded in 1227, and its construction proceeded



CATHEDRAL OF LEON, SPAIN

GENERAL VIEW

almost continuously for more than two hundred and sixty years. In general style the Cathedral is of the early Gothic, of Northern France, though late Gothic,

huge doors, and its fine windows, makes an impression of most imposing mass. The west façade, shown in our general view, is flanked by two projecting



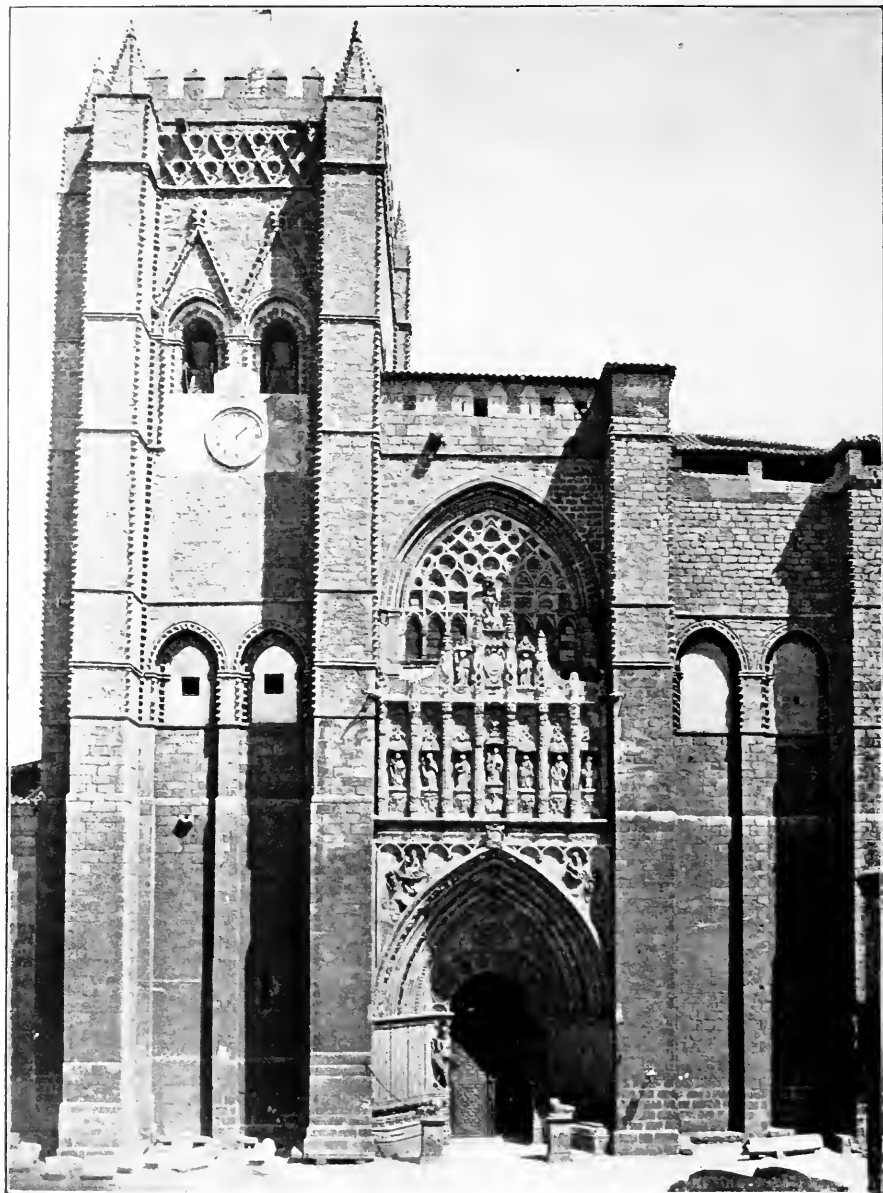
CATHEDRAL OF LEON, SPAIN

DETAIL OF THE FAÇADE

Renaissance, and, occasionally, Baroque features bear witness to the long duration of its building. In area it is about equal to Cologne Cathedral; and the exterior, with its flying buttresses, its

towers, of which that to the north has alone been finished. This tower was built between 1380 and 1440.

Comparing the three great Spanish cathedrals built in the French style—



CATHEDRAL OF AVILA, SPAIN

FAÇADE

those of Toledo, Burgos and Leon—Mr. Street awards the palm to Toledo. "Undoubtedly," he writes, "it lacks height, and later additions have shorn it of some of its attractiveness; nevertheless, with all its alterations for the worse, it is one of the most impressive churches I have ever seen." Its original architect is named in the Spanish account "Perez"—probably merely a translation of the French "Pierre"—and at any rate he was thoroughly acquainted with the best French churches of his time; for, like Burgos and Leon, Toledo is an example of those edifices which suddenly sprang up in Spain in the fully developed Gothic style without any connection with other work in the country, yet with the most obvious features of similarity to contemporary churches in other lands. Unfortunately scarcely a foot of the exterior has been left unaltered and in consequence its effect has been much injured, even were there sufficient open space about to obtain a general view of its noble structure. The principal portal, on the west side, dates from 1418 to 1450, and in spite of alterations is still an admirable example of the Gothic style. It consists of three doors, over each of which is a relief. Above the doors, the façade is adorned with numerous statues; and extending from buttress to buttress between the upper window and the gable of the great central doorway, is a sculptured representation of the Last Supper. The upper part of the façade is almost modern, dating from 1787.

The Cathedral of Leon is one of the finest examples of Gothic architecture on Spanish soil; and although smaller than the cathedrals of Toledo, Burgos and Seville, exceeds them in delicacy of execution. From beginning to end it is French in every part—French in detail, French in plan, French in general design. The churches which come nearest to it in style, and cannot be far from it in date, are the Cathedrals of Amiens and Rheims. It is probable, therefore, that Leon Cathedral was planned between 1230 and 1240, although it was not finished until the close of the following

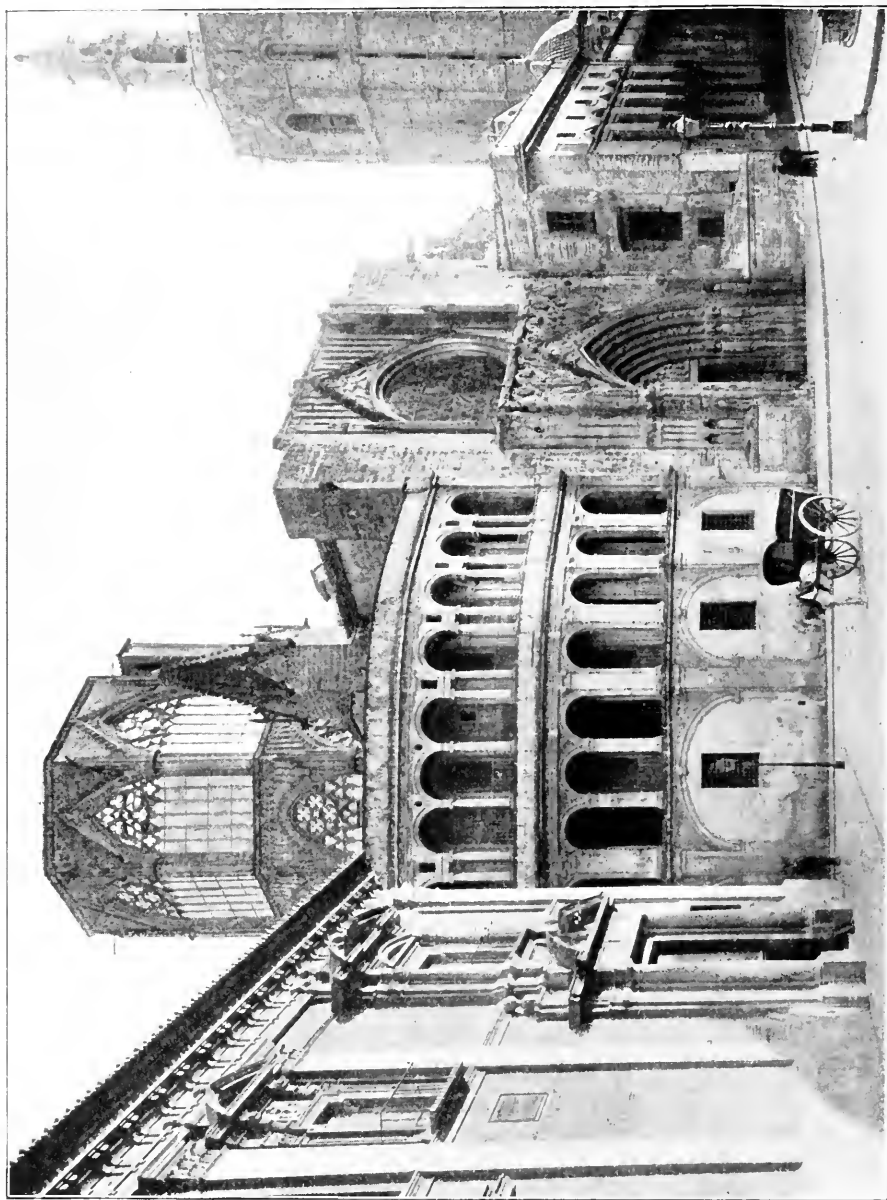
century. The building has been repeatedly "restored," but the discrepancies of style, visible mainly on the exterior, produce no unpleasant effect.

"Regarding the cathedral as French rather than Spanish," writes Mr. Street, "and giving up all attempt to make it illustrate a chapter in Spanish architectural history, it is in almost every respect worthy to be ranked among the noblest churches of Europe. Its detail is rich and beautiful, its plan excellent, and the sculpture with which it is adorned quite equal to that of any church of its age."

The Cathedral of Avila, a massive castle-like structure, was commenced in 1091, and, according to tradition, was completed in sixteen years, nineteen hundred laborers having been engaged upon it. The only parts of the present structure which can be as early as this, however, are the external walls of the apse; and in general character Avila is now to be ranked as of the end of the thirteenth or of the early fourteenth century. The appearance of the western façade is determined by the two fortress-like towers which mark the ends of the aisles. The south tower is unfinished; but the northern one is a fine work of the fourteenth century, with its bold buttresses, enriched at the angles with ball-carving, and its belfry lighted by two windows on each side, with tall crocketed pediments above them. The façade owes much of its effect to the contrast between the stolid simplicity of the general scheme and the enrichment and delicacy of the doorway, with its recessed portal, and the ornamentation above it.

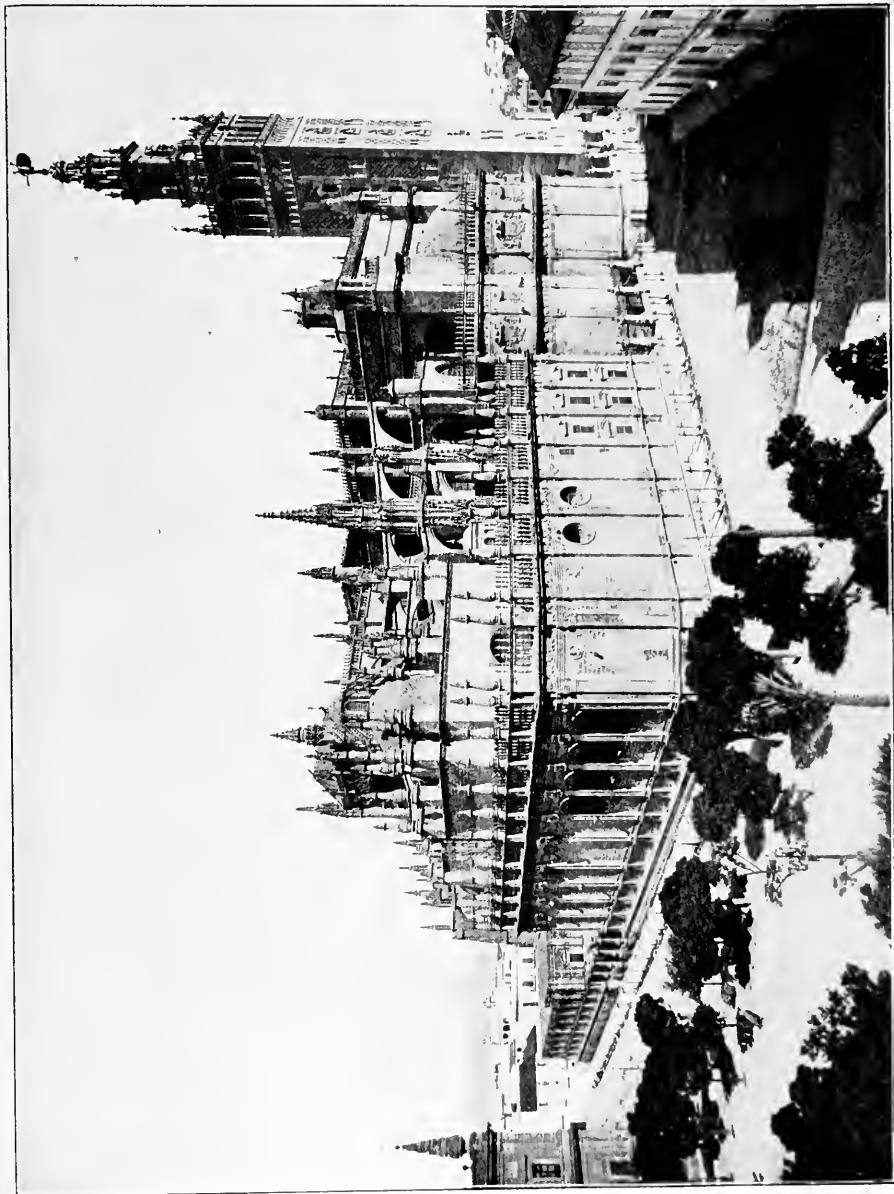
Valencia is another Spanish cathedral which is so closely hemmed in as to be almost unphotographable. Fortunately its most interesting portions—the elevation of the north transept, in which is the main entrance, and the fine lantern over the crossing—may well be seen from the Plaza de la Seo, from which our view is taken.

Valencia was founded in 1202 and finished in 1482. The east end, the south transept, and a part of the sacristy date from the thirteenth century. It is im-



CATHEDRAL OF VALENCIA, SPAIN

NORTH TRANSEPT



CATHEDRAL OF SEVILLE, SPAIN

GENERAL VIEW FROM SOUTHEAST

possible to determine accurately the date of the façade of the north transept and the noble lantern; but it is probably safe to consider them as of the latter half of the fourteenth century. The transept elevation is extremely rich in detail. The great portal is carved with four rows of figures, and over the arch rises a gabled canopy, the spandrels of which are filled with tracery and figures. Above, and set back from the face of the doorway, is a rose window, filled with intricate tracery; and over this is a crocketed pediment with tracery in the spandrels. The lantern, probably somewhat later than this façade, is one of the finest examples of its class in Spain, being very noble in general effect.

The Cathedral of Seville, of which the interesting Giralda Tower has been illustrated in a previous issue of this SERIES, is unquestionably one of the largest and richest Gothic churches in Christendom. It was begun in 1402 and finished in 1506, probably by German architects.

In his picturesque description of the cathedral, published in 1804, Cean Bermudez compares it, as seen from a distance, to "a high-pooped and beflagged ship, rising over the sea, with harmonious grouping of sails, pennons, and banners"; and another Spanish writer, Caveda, has well described its general aspect: "The effect," he says, "is truly majestic. The openwork parapets which crown the roofs; the graceful lanterns of the eight winding stairs that ascend in the corners to the vaults and galleries; the flying buttresses that spring lightly from aisle to nave, as the jets of a cascade from cliff to cliff; the slender pinnacles that cap them; the proportions of the arms of the transept and of the buttresses supporting the side walls; the large pointed windows that open between, one above another, just as the aisles and chapels to which they belong rise over each other; the pointed portals and entrances—all these combine in a marvelous effect, although they lack the wealth of detail, the airy grace and the delicate elegance that characterize the cathedrals of Leon and Burgos."

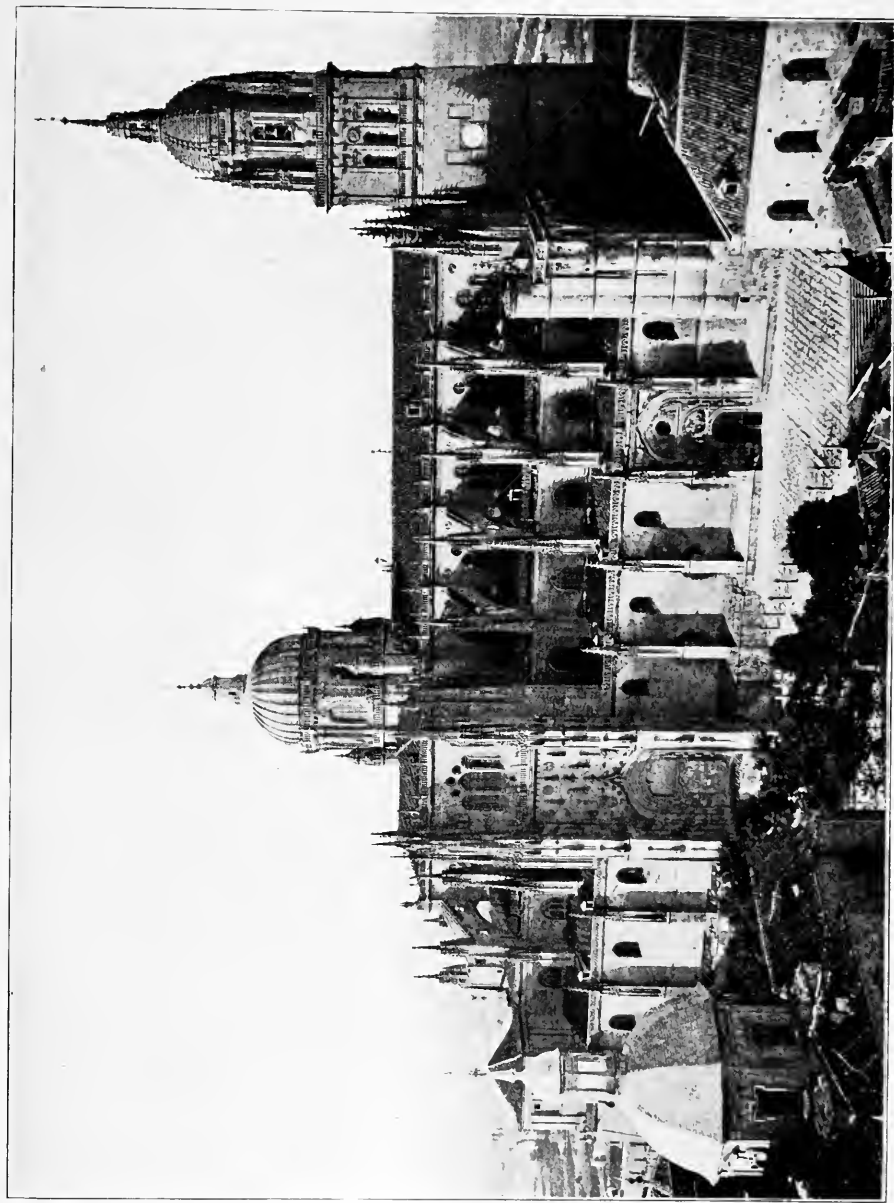
The construction of the New Cathe-

dral or "Catedral Nueva" of Salamanca was begun in 1509. In 1513 one Juan Gil de Hontañón (later the builder of Segovia Cathedral) became supervising architect; but numerous interruptions occurred, and the work was not finally completed until 1733. The cathedral, therefore, affords, not wholly to its artistic advantage, a record in stone of the changes of taste in Spain; and the late-Gothic, Plateresque and Baroque styles may all be studied here, side by side. "There is," writes Street, "but one point about it that can be given hearty and unstinted praise—the magnificence of the general idea and the noble scale and proportion of the whole; for the detail is mediocre throughout, fairly Gothic in its character inside, Gothic mingled with Renaissance outside, but everywhere wanting in vigor and effect.

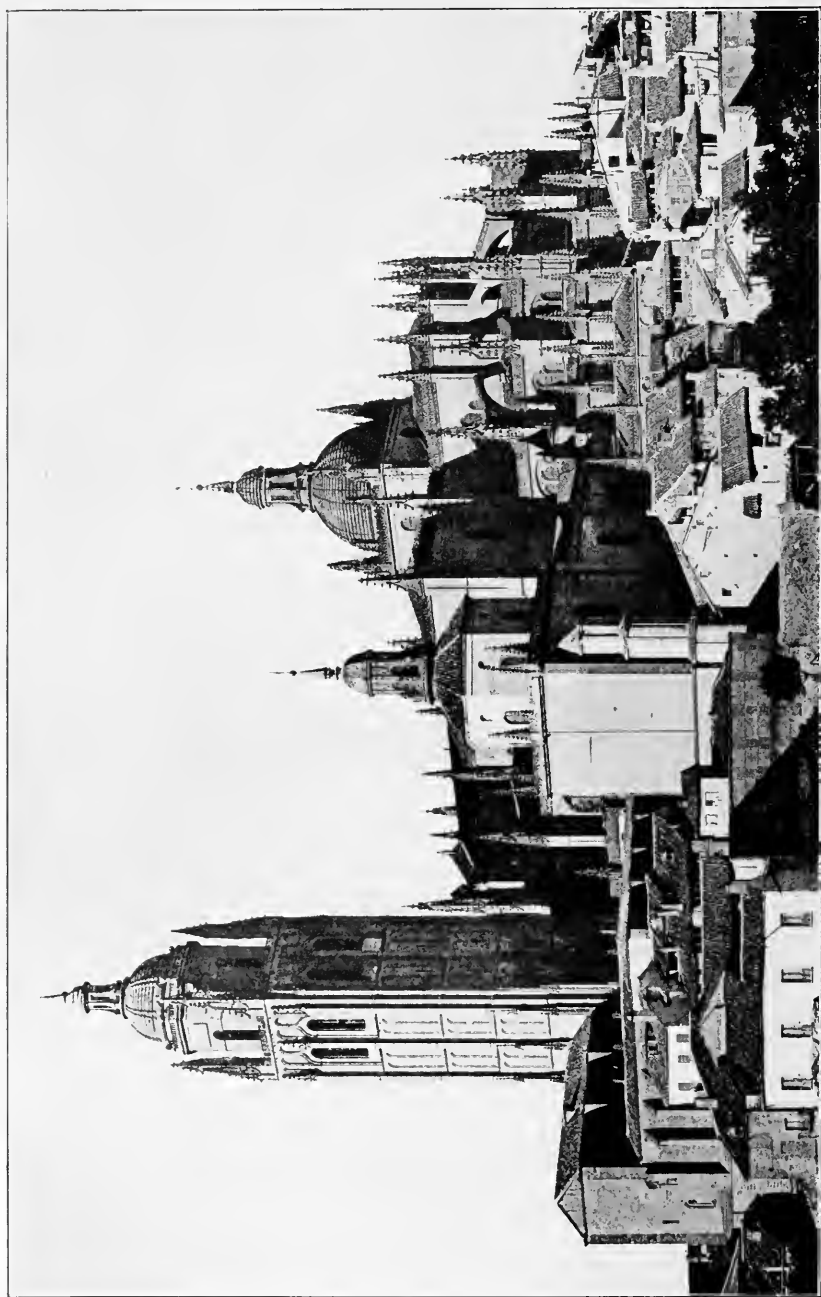
The Cathedral of Segovia, unrivaled in situation, crowns the highest point of a hill about which the city is built. It is, however, more interesting from its place in the history of Spanish art than as a work of architecture; for it is perhaps the latest Gothic building erected in Spain, and yet shows but little Renaissance influence. Its architect was the same Juan Gil de Hontañón who built much of the New Cathedral of Salamanca; and under his direction the corner-stone was laid in 1522. He was succeeded by his son, Rodrigo; and probably the greater part of the Cathedral was finished before Rodrigo's death in 1577.

In design Segovia Cathedral very closely follows the New Cathedral of Salamanca, but it has the advantage of having a great chevet in place of a square east end. Its general character, however, is extremely similar. There are the same pinnacles and buttresses, the same parapets, the same concealment of roofs and roof-lines everywhere, the same domed lantern over the crossing, the same lofty tower at the west end. In brief, so general are the points of similarity that Mr. Street believes that portions of the two works were executed from the same plans.

TALBOT D. WORT



NEW CATHEDRAL OF SALAMANCA, SPAIN



CATHEDRAL OF SEGOVIA, SPAIN

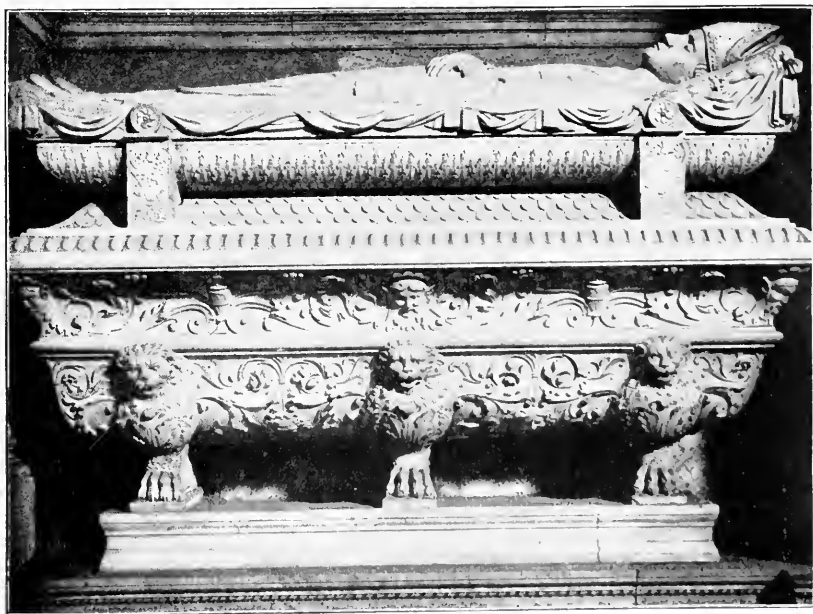
RENAISSANCE WALL TOMBS

IN ROME

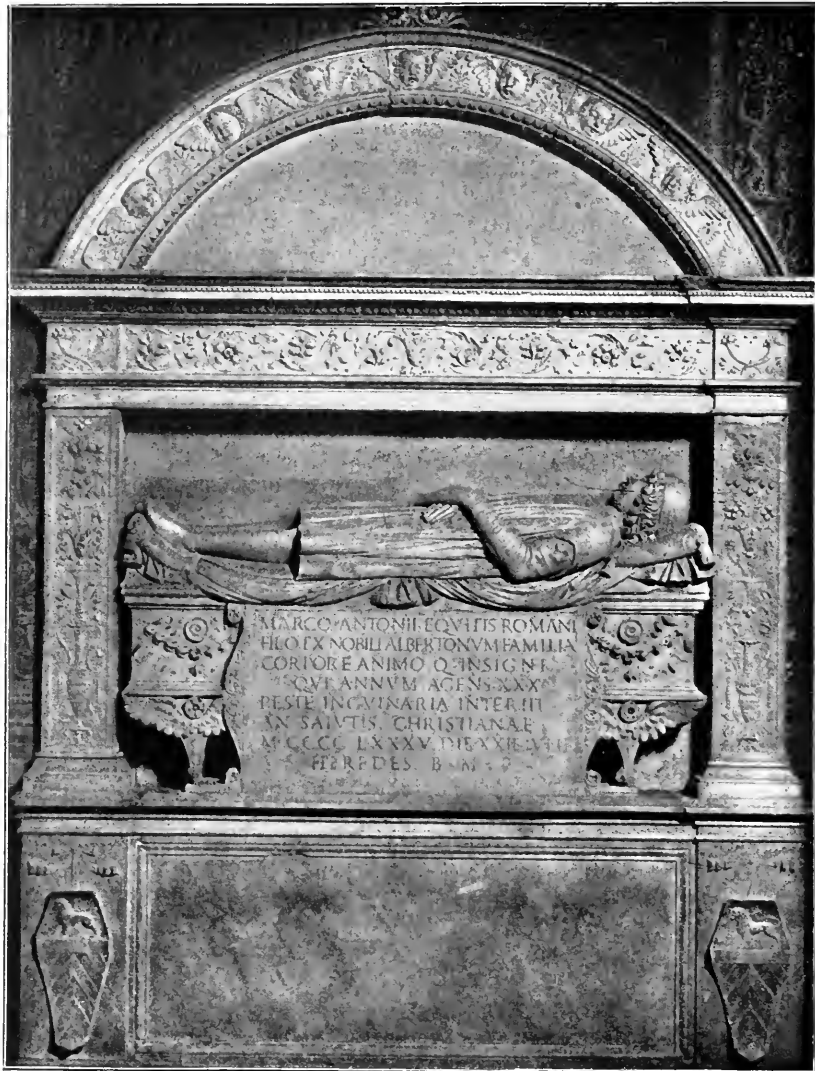
THE distinctive type of Renaissance mural tomb—a shallow niche, flanked by elaborately carved pilasters and roofed by a semi-circular arch, containing a marble coffin, set on an ornamented and inscribed pedestal, upon which lies an effigy of the occupant—became so common, particularly during the fifteenth century, that there is good reason to suspect that such monuments, like the sarcophagi of the ancient Romans, were often mere articles of manufacture, made wholesale, like our gravestones, and bought “ready-made,” a commission being given to some sculptor for a portrait of the deceased to be set upon the already executed sarcophagus, to which an appropriate inscription need be the only addition. Indeed, so numerous were the tombs of this general design during

the fifteenth century, that there is hardly an important church in Italy that does not possess one or more of them.

The constant repetition of a single type of monument by many contemporary artists had the same result that similar repetitions have had everywhere in the history of art—namely, that, as the effect of constant practice and rivalry, the type was brought to a high degree of general perfection, resulting in a great number of beautiful examples; but that side by side with these stand others, which, though technically skilful in execution, are yet mediocre in effect because executed perfunctorily, and as imitations rather than original works of art. Considered as a whole, however, these fifteenth-century mural tombs are unusually excellent, and form, perhaps, the most general and representative



TOMB OF CARDINAL BERNARDINO LONATI: THE SARCOPHAGUS—S. MARIA DEL POPOLO, ROME



TOMB OF MARCANTONIO ALBERTONI

S. MARIA DEL POPOLO, ROME

manifestation of plastic art during the latter part of the fifteenth and the early sixteenth centuries.

The motives constituting the type were arrived at by a curious sequence of historical steps. The kernel of the whole, the stone coffin, was invented by the Egyptians as a receptacle for the bodies of their dead; and the general shape of sarcophagus they devised has come down to us almost unaltered.

From the Egyptians, the sarcophagus was borrowed by the Etruscans, who decorated it with bas-reliefs, and finally with effigies of the dead; and, being a race of marked realistic tendencies, they often made these effigies more or less faithful portraits. Thus adorned, the sarcophagus passed from the Etruscans to the Romans; but they, though elaborating and perfecting the workmanship, did not change the funda-

mental conception or forms. The niche and its semi-circular arch were contributed by the early Christians of Rome. The Christian places of burial were the catacombs—long underground tunnels with vaulted roofs. In the sides of these tunnels, round-arched niches were constructed, and within them the dead were laid on shelves, their bodies hidden from sight by flat stone slabs on which appropriate inscriptions or em-

blems were carved. But when it became no longer necessary for the Christians to conceal their burial places they adopted the Roman fashion of enclosing their dead in sarcophagi of more or less elaboration, and set these sarcophagi within the round-arched niches of the catacombs, from which the recesses and arched canopies of the Renaissance tombs were imitated.

The early Christian sculptors, how-



TOMB OF GIOVANNI DELLA ROVERE

S. MARIA DEL POPOLO, ROME

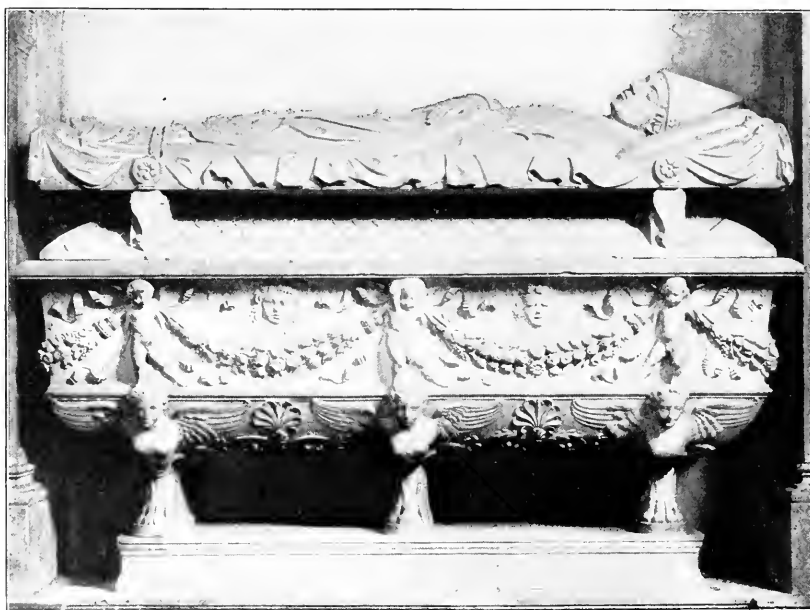


TOMB OF STA. MONICA

S. AGOSTINO, ROME

ever, took one step more. The Romans and Etruscans had never, in their effi-

gies, represented the occupants of the sarcophagi as dead, but as engaged in



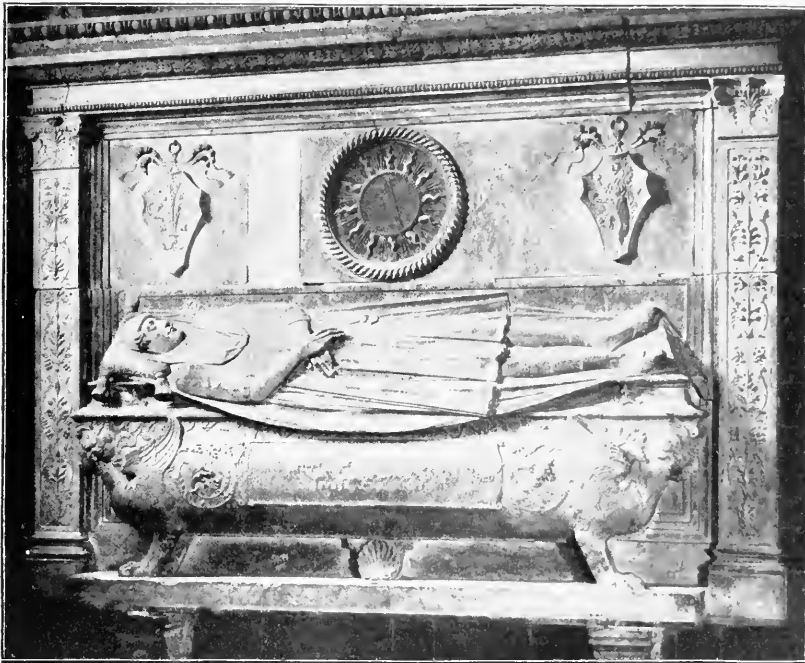
TOMB OF CARDINAL PIETRO RIARIO: THE SARCOPHAGUS

SS. APOSTOLI, ROME

some lifelike occupation, usually as saying farewell to their friends. But the Christian custom of laying out the body for burial in stately garb, and exhibiting it thus to the sight of the mourners, transformed the Roman conception of the effigy, and resulted in the recumbent and formally attired portrait-statues of the Renaissance monuments.

So conceived, the tomb afforded an unrivaled opportunity for delicate and ingenious architectural detail and emo-

of Mino da Fiesole and his pupils; for Mino from the extreme delicacy in detail of his work, the spirituality and strong emotional feeling of his sculpture, and above all his remarkable skill as an architectonic composer, was particularly fitted for such achievements. His visit to Rome occurred about 1473, and though many excellent tombs of a similar type had previously been erected in that city, there is evidence that a great impetus in the building of such



TOMB OF FRANCESCO TORNABUONI

S. MARIA SOPRA MINERVA, ROME

tional portrait sculpture, and, moreover, was well calculated to gratify that thirst for personal fame and the strong family pride which were marked features of Renaissance life. To the fact that it thus suited the genius of Renaissance artists, and also fulfilled the desires of their patrons, we doubtless owe the great popularity of such monuments.

The type of tomb shown in our illustrations was first perfected in Florence and thence imported to Rome, probably in part at least, through the influence

of monuments took place about this time.

Of all the Roman churches S. Maria del Popolo possesses the largest number of these mural tombs. The first of our illustrations shows the sarcophagus from the sepulcher of Cardinal Bernardino Lonati, in that church. It is a beautiful piece of late fifteenth-century workmanship, and the effigy is one of striking individuality. The second example, from the same church, shows the tomb of Marcantonio Albertoni, constructed about 1485. Also in S.

Maria del Popolo is the monument to Giovanni della Rovere, dated 1483. The painted lunette above is attributed to Pinturicchio.

The Church of San Agostino, Rome, dedicated to St. Augustine, the celebrated Father of the Latin church, contains the body of his mother, Santa Monica. Her tomb, erected in 1566, is the work of the famous Isaia of Pisa.

In the tribune of the Church of SS. Apostoli, Rome, stands the monument erected by Pope Sixtus IV. to his nephew, the Cardinal Pietro Riario, whose sarcophagus and effigy is shown in our illustration. It bears the date 1474, and is attributed, at any rate in part, to the hand of Mino da Fiesole.

The Church of S. Maria Sopra Minerva,

Rome,—the only Gothic church of any importance in the city,—contains many striking monuments, and one of the most beautiful among them is that of Francesco Tornabuoni, a Florentine who died in Rome in 1480. It is unquestionable that this tomb was executed by Mino da Fiesole.

The earliest in date of the tombs shown in our illustrations, and especially remarkable for the beauty of its recumbent figure, is that of Cardinal Stefaneschi, in S. Maria in Trastevere, Rome. The cardinal died in 1417; and his tomb is the work of Paolo Romano, an eminent sculptor of the latter part of the fourteenth and early fifteenth century, whose style was imitated from that of Isaia of Pisa.

P. R. D.



TOMB OF CARDINAL STEFANESCHI

S. MARIA IN TRASTEVERE, ROME



N. C. Mellen, Architect, New York

The Original Shingle Stains

FIRST MADE, FIRST IN QUALITY, AND FIRST
IN THE FAVOR OF SHINGLE-STAIN USERS

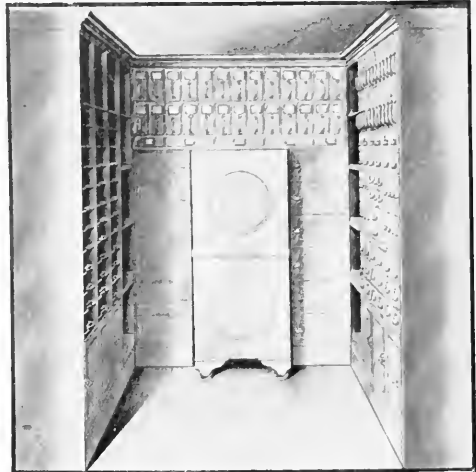
CABOT'S SHINGLE STAINS

have often been imitated during the last twenty years, but none of the imitations have the same depth and richness of color, the lasting qualities or the wood-preserving value of Creosote, "the best wood preservative known."

Proof on application—being samples on wood, and full information.

SAMUEL CABOT, Sole Manufacturer

Agents at all Central Points 70 Kilby St., Boston, Mass.



METALLIC VAULT FIXTURES

ensure systematic filing, afford security and economize space.

Send floor plan for submission sketches and estimates.

BOOKLET
507

ART METAL CONSTRUCTION CO.,
510 Gifford Avenue, Jamestown, New York.



MEMORIAL TABLETS
Bronze and Brass

GRILL WORK
Bronze, Brass and Iron

MOSAICS
Marble and Tile

Murdock Parlor Grate Co.

156 Boylston St., Boston Works, Middleboro, Mass.

All subscriptions are dated from the initial number of a volume, the back numbers of such volume being forwarded when subscription is received. Subscribe now for Vol. III of

The Architectural Reprint

A Quarterly Magazine

and receive Nos. 1, 2 and 3 at once, and No. 4 the last of the month. In this publication we reprint in each yearly volume 128 plates from the most famous books on Architecture and the allied arts. Subscription price \$3.50 a year

| | |
|--|--------|
| Volume I (1901) | \$5.00 |
| Volume II (1902) | \$5.00 |
| Volume III (1903), after January 1, 1904 | \$5.00 |
| Hôtels et Maisons de Paris, by Gêlis Dédot & Lambert | 4.50 |
| Èpoque Louis XVI, by Pinor | 5.00 |

Completed volumes and works in half buckram portfolios with specially designed covers

The Reprint Company, Inc
1423 F Street Washington, D.C.
P. O. Box 203. Write us for free sample plates

WANTED

the following back issues of the
Brochure Series

THE PUBLISHERS WILL PAY
TWENTY-FIVE CENTS EACH *for*
the NUMBERS DATED JULY, 1896,
AUGUST, 1896, SEPTEMBER,
1896, DECEMBER, 1896, IF IN
GOOD CONDITION *for* BINDING

THE PUBLISHERS WILL PAY
\$3.00 EACH *for* COMPLETE SETS
OF THE 1895 VOLUME IN
GOOD CONDITION *for* BINDING

Bates & Guild Company
No. 42 Chauncy Street, Boston, Mass

DETAILS OF BUILDING CONSTRUCTION

By Prof. Clarence A. Martin

*A copy of this invaluable reference
book should be in every architect's
office ☹☹ It will be found of daily
usefulness*

*It contains over three hundred detail
drawings—drawn accurately to
definite scale—showing all ordinary
details of wood construction after the
most improved and modern methods*

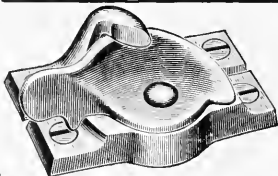
*These drawings are accompanied
with full but concise explanatory
notes, and the whole is the work, not
only of a teacher of the subject in
Cornell University, but of an archi-
tect of practical experience*

*Price, substantially bound
Two Dollars ☹☹ postpaid*

Bates and Guild Company
Publishers

Forty-two Chauncy St Boston Mass USA

FITCHSASHLOCKS



Adjust the
Sashes, prevent
Rattle and
securely Lock
the Window

"THE PERFECT WINDOW FASTENER"

SEND FOR CATALOGUE AND WORKING MODEL
THE W. & E. T. FITCH CO., NEW HAVEN, CONN.



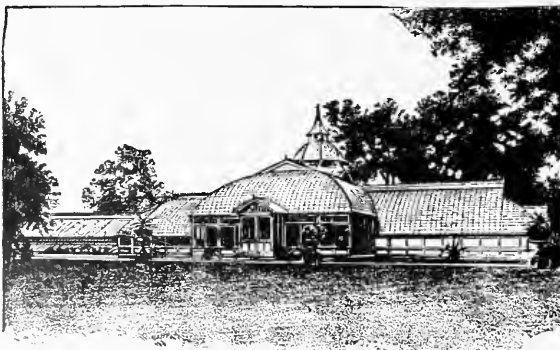
GREENHOUSES CONSERVATORIES

Horticultural Buildings
OF EVERY DESCRIPTION
DESIGNED, ERECTED, HEATED

Special attention given to designing and locating Ranges
of Glass to harmonize with surroundings on private
estates. Estimates and sketches submitted embodying
architect's suggestions. CATALOGUE ON APPLICATION.

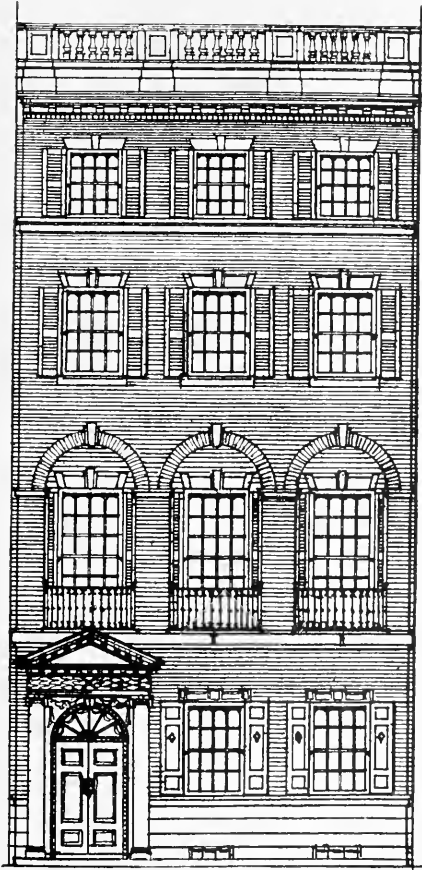
LORD & BURNHAM CO.

New York Office, 1133 Broadway
Gen'l Office & Works, Irvington-on-Hudson, N.Y.

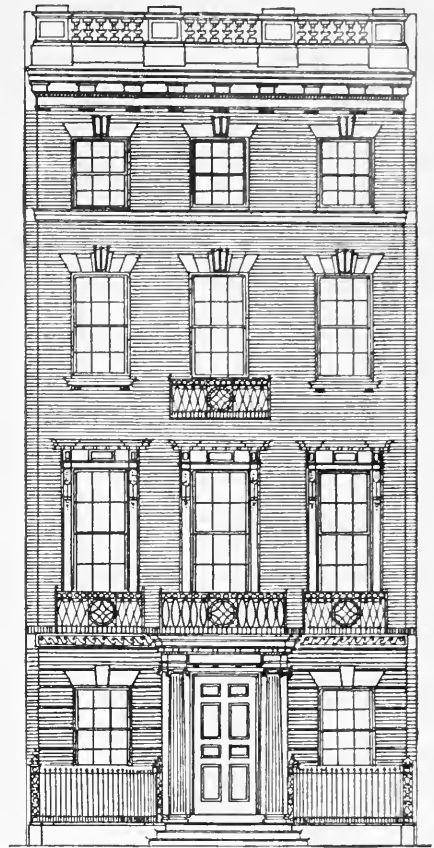


BROCHURE SERIES COMPETITION CC
THE DESIGN FOR
A Colonial City House Façade
ANNOUNCEMENT OF THE AWARD

Messrs. Joseph Everett Chandler, Hubert G. Ripley, President of the Boston Architectural Club, and Louis C. Newhall, Chairman of the Exhibition Committee of the Boston Architectural Club, the architects appointed to judge this Competition, have awarded the First Prize, among seventy competitors, many of whose drawings were unusually interesting, to Mr. William Adams, of Boston, and the Second Prize to Mr. George Clarence Johnson, of Philadelphia. The most general criticism which it is possible to make of designs so various in character, is that they showed too frequently a lack of knowledge as to exactly what constitutes "Colonial" detail, and too often a ten-



First Prize Design
Mr. William Adams, Boston



Second Prize Design
Mr. George Clarence Johnson, Philadelphia

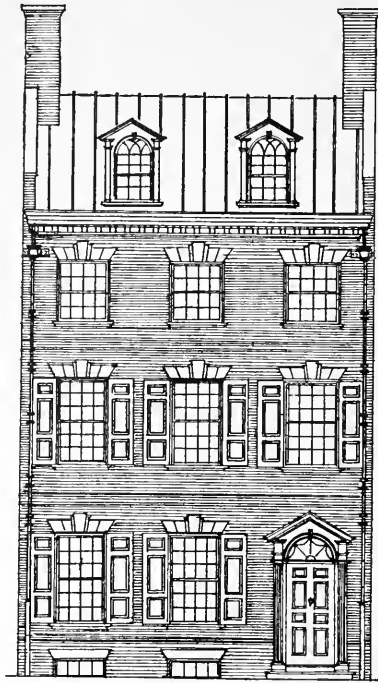
dency to coarsen this detail, the essence of which is delicacy and refinement.

To comment briefly in detail, on the drawings here reproduced, the First Prize design is both well proportioned and well studied, while its detail is both good and legitimately Colonial throughout. The Second Prize design also shows good and characteristically Colonial detail, and its proportions are excellent, with the exception of the cornice, which the Judges considered to be a trifle heavy. Were it not for the heaviness of the proportions of this cornice, the Judges would have found some difficulty in deciding which of these drawings should have ranked first.

The First Mention design, by "Colonial," is good in detail and well drawn, although the scale of the openings is not quite satisfactorily proportioned to the mass. The Second Mention, by "Salem," although well drawn, lacks Colonial feeling in the upper story, and betokens a certain lack of repose throughout. The Third Mention design, by "Device," although one of the best façades submitted, cannot be considered characteristically Colonial in its detail. The well-proportioned

Fourth Mention design, by "Mephisto," is unfortunate in the detail about the second story windows.

Other drawings submitted of which brief mentions should be made are those by "Crescent," in which the cornice is heavy and the second story windows somewhat coarse for Colonial work; by "Beacon Hill," well drawn and well proportioned, but too coarse and suspiciously "Frenchy" in detail; the designs of "Deerfield," "Oak Dale," "Architect" and "MCMIII" all may be characterized as well drawn, well proportioned and interesting, but lacking in Colonial quality in their details. In the façade by "Washington" the openings are well proportioned and the whole design is effective, but the detail lacks delicacy. The design by "Gander" is, on the other hand, excellent in detail as well as in proportion, but wants Colonial feeling, and is rather ordinary as to the entrance; "Higginsworth's" façade is badly drawn and the entrance is weak, but mass,



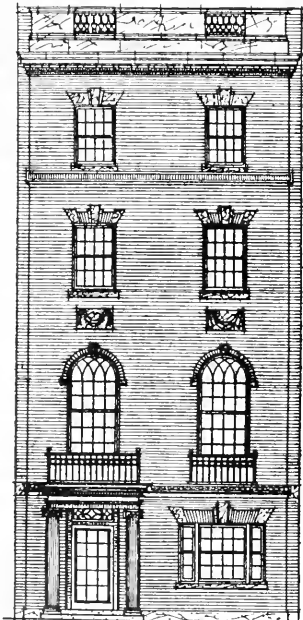
First Mention

"Colonial"

detail and window openings are all excellent.

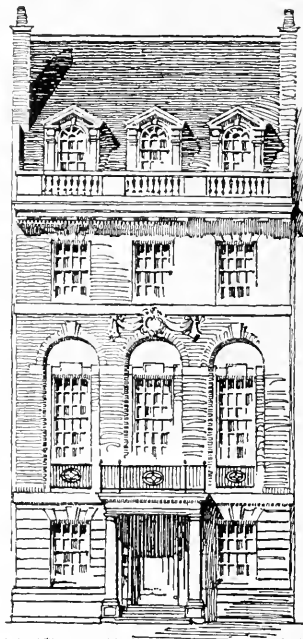
It is proposed to hold an informal exhibition of the drawings submitted in this Competition at the Architectural Club, Boston, provided the competitors agree to allow their designs to be shown. If any contestant is unwilling that his drawing should be so exhibited he will confer a favor on the Editor of THE BROCHURE SERIES by notifying him immediately.

The award of Competition D.D. set in previous issues, for the design and lettering of a bronze tablet bearing a given inscription, and intended to be set into the vestibule wall of a county court-house, closed on November 15. This Competition, which is in the main a problem in the drawing and arrangement of lettering, promises some interesting results, for lettering seems to be an altogether too much neglected portion of the equipment of the usual architect. The award will be announced in THE BROCHURE SERIES for December.



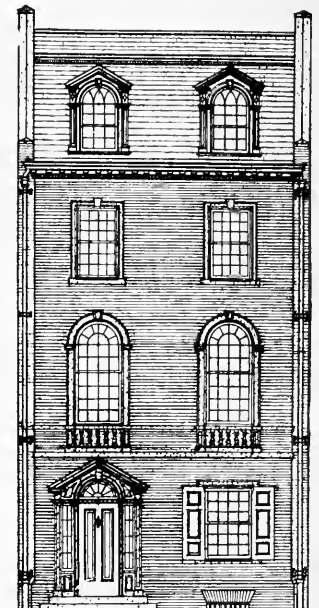
Second Mention

"Salem"



Third Mention

[Device]



Fourth Mention

"Mephisto"

KOH-I-NOOR Pencils KOH-I-NOOR TRACING CLOTH

The price is high, but the quality is higher than the price.

LET US SEND YOU OUR PRICES

WADSWORTH, HOWLAND & CO. INC.

82 and 84 Washington St., Boston

THE SOCIETY OF BEAUX-ARTS ARCHITECTS

HAS ESTABLISHED

A FREE COURSE OF STUDY

open to draughtsmen and students of any city, modelled on the general plan pursued at the Ecole des Beaux-Arts in Paris, and comprising frequent problems in Orders, Design, Archaeology, etc. For information apply to the

Secretary of Committee on Education

3 East 33d Street, New York City

FOLSOM

New Model Snow Guard



SPECIFIED by leading architects to hold the snow on all pitch roofs, entirely obviating all chance of injury to life or to the property it protects. The only perfect device for this purpose. It is made in various forms for old and new roofs, of slate, shingle, tile, or metal. **FULL INFORMATION ON APPLICATION**

The
Folsom Snow Guard Co.

Boston, Mass.

**MARKED
for your
PROTECTION**



**The Best
SASH CORD
Made**

Those New Stores

Which nearly every architect is now finishing for the fall trade, should be properly lighted. We have the record for successful store lighting, and issue a little booklet describing our special **STORE LIGHTING FIXTURE** : : Write for it.

I. P. FRINK, 551 Pearl St., New York

ABSOLUTELY WHITE TERRA COTTA

of the VERY BEST QUALITY. A most appropriate material for handsome fronts, or libraries in Classic or Renaissance style. Tiles and Other Surfaces made to order. All goods vitrified to withstand fire.

WHITE BRICK & TERRA COTTA CO.
156 Fifth Avenue, New York City.

SEND FOR OUR CATALOGUE OF FLY SCREENS

Artistic Patterns, Finest Workmanship
Delivered anywhere at Reasonable Prices
Finely equipped Factory Open all the year
THE A. J. PHILLIPS CO., FENTON, MICH.



Who use the Hot-Air Pump?

About 30,000 families in every part of the world. The following names are selected from our books, simply because they represent a discriminating class, who search for the best article for any purpose and then buy it; these men have *tried* the Hot-Air Pump, and it has *not* been found wanting:

J. Pierpont Morgan, New York
Khedive of Egypt
Whitelaw Reid, New York
W. K. Vanderbilt, New York
George Vanderbilt, New York
Frederick W. Vanderbilt, New York
Chauncey M. Depew, New York
Charles Lanier, New York
H. H. Westinghouse, Pittsburg
King Edward VII
Mayor Seth Low, New York
Andrew Carnegie, New York
H. O. Havemeyer, New York
Montague Allan, Montreal

H. M. Flagler, New York
Colgate Hoyt, New York
W. C. Whitney, New York
Bruce Price, New York
Sultan of Turkey
Ex-Senator D. B. Hill, Albany
Secretary John Hay, Washington
E. C. Tiffany, Cold Spring Harbor, N.Y.
Valentine Blatz, Milwaukee, Wis.
George B. Post, Bernardsville, N.J.
R. L. Agassiz, Hamilton, Mass.
W. W. Allis, Milwaukee, Wis.
John H. Converse, Philadelphia
Joseph Jefferson, Buzzards Bay, Mass.

But the fact that the rich are buyers does not mean that the Hot-Air Pump is an expensive luxury. It is within the purchasing power of the modest dweller in any country cottage, and will prove to be the cheapest household investment he ever made, supplying all the comforts and luxuries which go with an *abundant* and *constant* water supply.

The Hot-Air Pump, a permanent investment which will outlast a generation of users, can now be bought for \$108.

Descriptive Catalogue A 8 sent free on application.

RIDER-ERICSSON ENGINE CO.

35 Warren Street, New York
40 Dearborn Street, Chicago.

40 N. 7th Street, Philadelphia.
239 Franklin Street, Boston.
Teniente-Rey 71, Havana, Cuba.

592 Craig Street, Montreal, P. Q.
22 Pitt Street, Sydney, N. S. W.